

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

ORDER NO. R7-2004-0086
NPDES NO. CA0104248

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
IMPERIAL IRRIGATION DISTRICT, OWNER/OPERATOR
EL CENTRO GENERATING STATION
El Centro – Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region finds that:

1. On December 22, 2003 Imperial Irrigation District (hereinafter referred to as the discharger), P.O. Box 937, Imperial, California 92251 submitted an application to update its waste discharge requirements (WDRs) and to renew its permit to discharge wastewater under the National Pollutant Discharge Elimination System (NPDES). The application is to update its WDRs and NPDES permit for the District's El Centro Generating Station, located at 485 E. Villa Ave., El Centro, California, 92243.
2. Imperial Irrigation district owns the El Centro Generating Station, which is a gas and oil fired power plant in the city of El Centro. The plant consists of two (2) steam units and one (1) combined cycle unit and has a total output of 240 Megawatts (MW). The steam units are rated at 77 MW and 46 MW, and the combined cycle unit is rated at 117 MW (85 MW gas turbine and 32 MW steam turbine). All units are cooled using water circulated through unit specific cooling towers. The facility has a potential to discharge a maximum of 1.04 million gallons per day (MGD) of industrial cooling water to Central Drain No. 5, which flows into the Alamo River, which flows to the Salton Sea.
3. The final effluent is discharged to Central Drain No. 5 in the NE ¼ of Section 32, T15S, R14E, SBB&M, as indicated on Attachment "A" incorporated herein and made a part of this Board Order.
4. This facility provides treatment and chlorination and dechlorination process units. Cooling tower supply water is treated with corrosion inhibitors, deposit control agents, microbial control agents and a coagulant and flocculent. In addition chlorination is used as an oxidizing biocide and sulfuric acid is added for pH control. The effluent is dechlorinated using a disulfite based solution prior to discharge to Central Drain No. 5 via an outfall pipe. The discharger adds the following chemicals to the cooling tower water:

<u>Name of Chemicals</u>	<u>Purpose</u>
TRASAR 73202 Sodium Bisulfate Sodium Formaldehyde Bisulfite	Cooling Water Dispersant
NALCO 1336 Sodium Tolytriazole	Corrosion Inhibitor
NALCO 7396 Tetrapotassium Pyrophosphate	Water Stabilization
NALCO 7320 Dibromoacetonitrile	Microorganism Control Chemical

2,2-Dibromo-3-nitrilopropionamide
Polyethylene Glycol

CATFLOC 8103
Phosphate based anionic polymer

Coagulant and Flocculent

NALCO 7408
Sodium Bisulfite

Bisulfite Based Dechlorinating Agent

SULFURIC ACID

pH Control

SODIUM HYPOCHLORITE

Oxydizing Biocide

5. The NPDES Permit application described the proposed discharge as follows:

<u>Parameter</u>	<u>Units</u>	<u>Maximum Daily Value</u>	<u>Maximum 30 Day Value</u>	<u>Monthly Average Value</u>
Flow	MGD ¹	1.04	0.346	0.143
Total Suspended Solids	mg/L ² lbs	23.5 5.06	15.42 40.45	11.7 13.20
Ammonia	mg/L lbs	1.0 2.27	-----	-----
Chlorine Total Residual	mg/L lbs	0.02 0.015	0.010 0.006	0.010 0.007
Oil and Grease	mg/L lbs	8.08 5.68	8.08 5.35	3.51 4.18
Total Phosphorus	mg/L lbs	3.26 0.95	2.92 1.67	1.39 1.66
Nitrate-Nitrite (as N)	mg/L Lbs	<0.1 -----	<0.1 -----	<0.1 -----
Total Iron	mg/L lbs	2.06 4.67	1.06 2.78	0.34 0.41

6. The results of analyses performed for the priority pollutants as required by the California Toxics Rule (CTR) show the following pollutants to be present:

¹ Million Gallons per Day
² Milligrams per Liter

<u>Parameter</u>	<u>Units</u>	<u>Maximum Value</u>
Arsenic	µg/L ³	14
Copper	µg/L	200
Lead	µg/L	8
Nickel	µg/L	12
Selenium	µg/L	66
Thallium	µg/L	14
Zinc	µg/L	240
Cyanide	µg/L	10

7. The discharger has been subject to an NPDES Permit and WDRs adopted in Board Order No. 99-016 (NPDES No. CA0104248) adopted June 10, 1999, which allows for discharge to the Central Drain No. 5.
8. Discharges exceeding 1.0 MGD are classified as Major by the United States Environmental Protection Agency (USEPA). Accordingly, this discharge is classified this discharge as a Major Discharge.
9. This Board Order updates the WDRs to comply with the current laws and regulations as set forth in the California Water Code and the California Code of Regulations.
10. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), as amended to date, designates the beneficial uses of ground and surface waters in this Region.
11. The designated beneficial uses of waters of the Imperial Valley Drains are:
 - a. Fresh Water Replenishment of Salton Sea (FRSH)
 - b. Water Contact Recreation (REC I)⁴
 - c. Non-Contact Water Recreation (REC II)⁵
 - d. Warm Water Habitat (WARM)
 - e. Wildlife Habitat (WILD)
 - f. Preservation of Rare, Threatened or Endangered Species (RARE)⁶
12. Federal regulations for storm water discharges were promulgated by the USEPA (40 CFR Parts 122, 123, and 124). The regulations require specific categories of facilities which discharge storm water associated with industrial activity to obtain NPDES permits and to implement Best Conventional Pollutant Technology (BCT) and Best Available Technology Economically Achievable (BAT) to

³ Micrograms per Liter

⁴ Unauthorized Use.

⁵ The only REC II usage that is known to occur is from infrequent fishing

⁶ Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

reduce or eliminate industrial storm water pollution.

13. The State Water Resources Control Board (SWRCB) adopted Order No. 97-03-DWQ (General Permit No. CAS000001), specifying WDRs for discharges of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent by industries to be covered under the Permit.
14. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA: Public Resources Code Section 21000, et. Seq.), pursuant to Section 13389 of the California Water Code.
15. The proposed discharge is consistent with the anti-degradation provisions of 40 CFR 131.12 and SWRCB Resolution No. 68-16. If terms of the permit are met, the impact on water quality will be insignificant, including potential impacts on aquatic life, which is the beneficial use most likely affected by the discharge.
16. Federal regulations (40 CFR 122(d)(1)) require effluent limitation for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numeric water quality standard.
17. The USEPA adopted the National Toxics Rule (NTR) (40 CFR § 131.36) on February 5, 1993 and California Toxics Rule (CTR) (40 CFR § 131.36) on May 18, 2000. The CTR promulgates new criteria for both human health protection and protection of aquatic life. New numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants are listed. In addition, the CTR contains a compliance schedule provision, which authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal criteria when certain conditions are met.
18. On March 2, 2000, the SWRCB adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (California Toxics Policy). This Policy establishes (1) implementation provisions for priority pollutant criteria promulgated by the U.S. EPA through the NTR and CTR and for priority pollutant objectives established by the Regional Water Quality Control Boards in their water quality control plans; (2) monitoring requirements for 2, 3, 7, 8- tetrachlorodibenzo-p-dioxin (TCDD) equivalents; and (3) chronic toxicity control provisions.
19. On April 18, 2002, the Regional Board received the first data set of monitoring results for the Priority Pollutants monitoring submitted by the discharger as required by the CTR (40 CFR §131.38). Based on the Reasonable Potential Analysis methodology in the State Implementation Plan (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California), the following constituents have been found to have reasonable potential to cause or contribute to an excursion above water quality objectives. The monitoring results indicate reasonable potential for cyanide, copper, nickel, selenium, thallium, and zinc.
20. On March 29, 2004, the Regional Board received a letter from the discharger dated March 22, 2004 providing an infeasibility report and request for a compliance schedule. The letter contained a proposed five-year schedule with milestone requirements and completion dates summarized as follows:

- Year 1 - Continue source stream pollutant monitoring. Obtain funding for environmental consultant.
- Year 2 - Evaluate testing results and select control strategy. Obtain funding for control project implementation.
- Year 3 - Prepare major work authorization and begin construction of control project.
- Year 4 - Complete construction and start operation and testing of control project.
- Year 5 - Full compliance with CTR expected.

21. The governing Water Quality Objective (WQO) for cyanide is 1.0 ug/L, the saltwater aquatic life criteria contained in the CTR. As noted in Finding 20, above, cyanide has reasonable potential to exceed water quality objectives, and final Water Quality Based Effluent Limitations (WQBELs) are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 0.5 µg/L monthly average and 1.0 µg/L daily maximum. The Discharger indicated in its March 22, 2004 Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for cyanide may be established. The previous permit did not contain an effluent limit for cyanide, and it is not possible to statistically determine current plant performance based on eight data points. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 10.0 µg/L. This interim effluent limit is based on the best professional judgment of Regional Board staff.
22. The governing WQO for copper is 3.1 ug/L, the saltwater aquatic life criteria contained in the CTR. As noted in Finding 20, above, copper has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 2.39 µg/L monthly average and 4.80 µg/L daily maximum. The Discharger indicated in its March 22, 2004, Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for copper is required. The previous permit did not contain an effluent limit for copper, and it is not possible to statistically determine current plant performance based on eight data points. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 200.0 µg/L. This interim effluent limit is based on monitoring data provided by the discharger and the best professional judgment of Regional Board staff.
23. The governing WQO for nickel is 8.2 ug/L, the freshwater aquatic life criteria contained in the CTR. As noted in Finding 20, above, nickel has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBEL calculated pursuant to State Implementation Policy (SIP) procedures are 6.71 µg/L monthly average and 13.5 µg/L daily maximum. The Discharger indicated in its March 22, 2004, Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for nickel is required. The previous permit did not contain an effluent limit for nickel, and it is not possible to statistically determine current plant performance based on eight data points. Therefore, the interim average monthly effluent limit is the Maximum Effluent Concentration (MEC), 12.0 µg/L. The interim maximum daily effluent limit (MDEL) is 13.5 µg/L, the MDEL calculated pursuant to the SIP. These interim effluent limits are based on the best professional judgment of Regional Board staff.
24. The governing WQO for selenium is 5.0 ug/L, the freshwater aquatic life criteria contained in the CTR. As noted in Finding 20, above, selenium has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 4.09 µg/L monthly average and 8.22 µg/L daily maximum. The Discharger indicated in its March 22, 2004, Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for selenium is required. The previous permit did not contain an effluent limit for selenium, and it is not possible to statistically determine current plant performance based on eight

data points. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 66.0 µg/L. This interim effluent limit is based on the best professional judgment of Regional Board staff.

25. The governing WQO for thallium is 6.3 ug/L, the freshwater aquatic life criteria contained in the CTR. As noted in Finding 20, above, thallium has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBELs calculated pursuant to State Implementation Policy (SIP) procedures are 6.30 µg/L monthly average and 12.60 µg/L daily maximum. The Discharger indicated in its March 22, 2004, Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for thallium is required. The previous permit did not contain an effluent limit for thallium, and it is not possible to statistically determine current plant performance based on eight data points. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 14.0 µg/L. This interim effluent limit is based on the best professional judgment of Regional Board staff.
26. The governing WQO for zinc is 81 ug/L, the saltwater aquatic life criteria contained in the CTR. As noted in Finding 20, above, zinc has reasonable potential to exceed water quality objectives, and final WQBELs are required. The WQBEL calculated pursuant to State Implementation Policy (SIP) procedures are 44.8 µg/L monthly average and 90.0 µg/L daily maximum. The Discharger indicated in its March 22, 2004, Feasibility Study that it is infeasible to comply immediately with the WQBELs. Therefore, pursuant to the provisions of the SIP, an interim effluent limit for zinc is required. The previous permit did not contain an effluent limit for zinc, and it is not possible to statistically determine current plant performance based on eight data points. Therefore, the interim effluent limit is the Maximum Effluent Concentration (MEC), 240.0 µg/L. This interim effluent limit is based on monitoring data provided by the discharger and the best professional judgment of Regional Board staff.
27. The discharger is not able to consistently comply with the new effluent limitations for cyanide, copper, nickel, selenium, thallium, and zinc.
28. Corrective actions by the discharger are necessary in order for the discharge from the wastewater treatment plant to comply with the new effluent limits pursuant to the implementation of the CTR.
29. Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, SWRCB's plans and policies, USEPA guidance and regulations, best professional judgment, and best available technology economically achievable.
30. Effluent limitations and toxic and pretreatment effluent standards, established pursuant to Section 208(b), 301, 302, 304, and 307 of the Federal Clean Water Act (CWA) and amendments thereto that are applicable to this discharge are implemented in this Board Order.
31. Regional Board staff prepared a Fact Statement regarding the facility. The Fact Statement is incorporated into this permit by this reference.
32. The Board has notified the discharger and all known interested agencies and persons of its intent to renew and update NPDES Permit and WDRs for said discharge, and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
33. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Board Orders No. 99-016 is terminated, and in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act, and regulations and guidelines adopted thereunder, the discharger shall comply with the following:

A. Effluent Limitations

1. Representative samples of wastewater discharged to Central Drain No. 5 from the treatment systems shall not contain constituents in excess of the limits indicated below. The discharge to the Central Drain No.5 shall be monitored at a location which is acceptable by the Regional Board's Executive Officer or his designee:

<u>Constituent</u>	<u>Unit</u>	<u>30-Day Arithmetic Mean Discharge Rate⁷</u>	<u>7-Day Arithmetic Mean Discharge Rate⁸</u>	<u>Daily Maximum</u>
Total Residual Chlorine	mg/L	0.01	0.02	
Total Dissolved Solids	mg/L	4000	4500	-----
Flow	mgd	-----	-----	1.04

2. The hydrogen ion (pH) of the effluent shall be maintained within the limits of 6.0 to 9.0.
3. The effluent shall not contain heavy metals, chemicals, pesticides or other constituents in concentrations toxic to aquatic life.
4. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
5. Stormwater discharges from the facility shall not cause or threaten to cause pollution, contamination, or nuisance.
6. Stormwater discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR, Part 302.
7. There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Board.
8. Wastewater discharged to the Central Drain No. 5 shall not exceed these effluent limits. These limits are calculated based on monitoring results and using the California Toxic Rule and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California for water quality based effluent limits:

<u>Constituent</u>	<u>Units</u>	<u>Date Effluent Limit Becomes Effective</u>	<u>Average Monthly Effluent Limit</u>	<u>Maximum Daily Effluent Limit</u>
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⁷ 30 Day Mean-The arithmetic mean of pollutant parameter values of samples collected in a calendar month s as specified in the Monitoring and Reporting Program.

⁸ 7 Day Mean-The arithmetic mean of pollutant parameter values of samples collected in a calendar week (Sunday – Saturday) as specified in the Monitoring and Reporting Program.

Copper (Interim)	µg/L	July 1, 2004	200.0	200.0
Copper (Final)	µg/L	July 1, 2009	2.39	4.8
Cyanide (Interim)	µg/L	July 1, 2004	10.0	10.0
Cyanide (Final)	µg/L	July 1, 2009	0.5	1.0
Nickel (Interim)	µg/L	July 1, 2004	12.0	13.5
Nickel (Final)	µg/L	July 1, 2009	6.71	13.5
Selenium (Interim)	µg/L	July 1, 2004	66.0	66.0
Selenium (Final)	µg/L	July 1, 2009	4.09	8.22
Thallium (Interim)	µg/L	July 1, 2004	14.0	14.0
Thallium (Final)	µg/L	July 1, 2004	6.3	12.6
Zinc (Interim)	µg/L	July- 1, 2004	240.0	240.0
Zinc (Final)	µg/L	July 1, 2009	44.8	90.0

B. Receiving Water Limitations

1. Receiving water limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in the Central Drain No. 5:
 - a. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
 - b. The presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.
 - c. Result in the deposition of pesticides or combination of pesticides to be detected in concentrations that adversely affect beneficial uses.
 - d. Aesthetically undesirable discoloration or odors in the receiving water.

- e. A significant increase in fungi, slime, or other objectionable growth.
 - f. Increase turbidity that results in affecting beneficial uses.
 - g. The normal ambient pH to fall below 6.0 or exceed 9.0 units.
 - h. Impact the receiving water temperature, resulting in adversely affecting beneficial uses.
 - i. Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
 - j. The chemical constituents to exceed concentrations that adversely affect beneficial uses or create nuisance.
 - k. Toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
 - l. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause or otherwise adversely affect beneficial uses.
2. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act or amendments thereto, the Regional Board will revise and modify this Permit in accordance with such more stringent standards.

C. Prohibitions

- 1. Bypass, overflow, discharge or spill of untreated or partially treated waste is prohibited.
- 2. The discharge of waste to land not owned or controlled by the discharger is prohibited.
- 3. Discharge of treated wastewater at a location or in a manner different from that described in Finding Nos. 2 and 3, above, is prohibited.
- 4. The bypass or overflow of untreated wastewater or wastes to the Central Drain No. 5 is prohibited, except as allowed in the Standard Provision No. 13, as contained in the Standard Provisions for National Pollutant Discharge Elimination System Permit (hereinafter Standard Provisions), dated October, 1990.
- 5. The discharger shall not discharge waste in excess of the design treatment capacity of the disposal system.
- 6. The discharge shall not cause degradation of any water supply.

D. Specifications

- 1. The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in Section 13050(l) and 13050(m) of Division 7 of the California Water Code.
- 2. A minimum depth of two (2) freeboard feet shall be maintained at all times in the water storage basins.

3. The 30-day monthly average daily dry weather discharge flow shall not exceed 1.04 MGD.
4. No changes in the type or amount of treatment chemicals added to the process water as described in Finding No. 4 of this Board Order shall be made without the written approval of the Regional Board's Executive Officer.
5. The discharger shall use the best practical cost effective control technique currently available to limit mineralization to no more than a reasonable increment approved by the Regional Board's Executive Officer.
6. Make up water supply ponds shall be managed to prevent breeding of mosquitoes, in particular:
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface;
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
7. Bioassays shall be performed to evaluate the toxicity of the discharged wastewater in accordance with the following procedures unless otherwise specified by the Regional Board's Executive Officer or his designee:
 - a. Bioassays shall be conducted on an invertebrate species as approved by the Regional Board's Executive Officer. Ceriodaphnia dubia (water flea) is the suggested test species that may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/821-R-02-013 – Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, 4th Edition, and EPA/821-R-02-012 Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, 5th Edition, or subsequent editions.
 - b. The bioassay test shall be performed as specified in the Monitoring and Reporting Program.
8. Any chronic toxicity test that exceeds 2 chronic toxicity units (TU_c) or a three-sample median⁹ (consecutive samples) that exceeds 1 TU_c may trigger an accelerated monitoring frequency. In addition, any acute toxicity test results showing high toxicity may trigger an accelerated monitoring frequency. High acute toxicity is defined as follows:
 - a. Less than 80% survival when acute toxicity is calculated from the results of the chronic toxicity test, or
 - b. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test, or
 - c. Results of acute toxicity t-test for 100 percent effluent concentration that is reported as failed.
9. Accelerated monitoring frequency shall consist of performing three (3) toxicity tests in a six-week period following the first exceedence of the chronic or acute toxicity triggers.
10. A Toxicity Identification Evaluation (TIE) may be triggered if testing from the accelerated

⁹ 3-Sample median is defined as follows: The middle value of 3 consecutive samples arranged from the low value to the high value.

monitoring frequency indicate any of the following:

- a. A chronic toxicity of 2 TU_c or greater;
 - b. The three-sample median exceeds 1 TU_c;
 - d. Result of acute toxicity t-test for 100 percent effluent concentration that is reported as failed.
 - e. Less than 80% survival when acute toxicity is calculated from the results of the chronic toxicity test, or
 - f. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test.
11. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the USEPA which include the following:
- a. Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a) or subsequent editions;
 - b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a) or subsequent editions;
 - c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (USEPA, 1993a) or subsequent editions;
 - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b) or subsequent editions;
12. If repeated toxicity tests reveal toxicity, the discharger may be required to conduct a Toxicity Reduction Evaluation (TRE). The discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:
- a. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations, EPA/600/2-88/70 April 1989.
 - b. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.
13. The facility shall be protected from any washout or erosion of wastes or covering material, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.
14. The discharger shall take specific actions as indicated in the following table to achieve compliance with the new effluent limits pursuant to the implementation of the CTR and provide an annual report to summarize each milestone and accomplishments:

Milestone	Completion Date	Milestone Description
1	July 1, 2005	Continue source stream pollutant monitoring
		Obtain funding for environmental consultant
2	July 1, 2006	Evaluate testing results and select control strategy
		Obtain funding for control project implementation
3	July 1, 2007	Prepare major work authorization and begin construction of control project
		Submit report detailing facilities design, rate adjustment, and funding.
4	July 1, 2008	Complete design and begin construction
		Complete construction and start operation and testing of control project
5	July 1, 2009	Facility to operate in compliance with CTR
		Submit report and verification of compliance with CTR

15. The discharger shall, as required by the Executive Officer, conduct a Pollutant Minimization Program in accordance with the California Toxics Policy when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and a sample result is reported as detected and not quantified and the effluent limitation is less than the reported minimum level; or a sample result is reported as not detected and the effluent limitation is less than the method detection limit.

E. Provisions

1. This Board Order shall serve as a NPDES Permit pursuant to Section 402 of the Federal Clean Water Act, as amended, and shall become effective at the end of 10 days from the date of the hearing when this Board Order was adopted by the Regional Board, provided the Regional Administrator, USEPA has no objections.
2. This Board Order expires five (5) years from date of adoption, on July 1, 2009, and the discharger shall submit an NPDES application and file a complete Report of Waste Discharge in accordance with Title 23, California Code of Regulations, at least 180 days in advance of such date as an application for issuance of a new Board Order.
3. The discharger shall comply with all conditions of this Board Order. Noncompliance constitutes a violation of the Federal Clean Water Act and Porter-Cologne Water Quality Control Act, and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification of WDRs; or denial of a Permit renewal application.
4. The discharger shall comply with "Standard Provisions for National Pollutant Discharge Elimination System Permit" dated October 1990 (attached).

5. The discharger shall comply with Monitoring and Reporting Program No. R7-2004-0086, and future revisions thereto, as specified by the Regional Board's Executive Officer.
6. The discharger shall ensure that all site-operating personnel are familiar with the content of this Board Order, and shall maintain a copy of this Board Order at the site.
7. The discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the discharger to achieve compliance with the conditions of this Board Order. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of this Board Order. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Board upon demand.
8. Unless otherwise approved by the Regional Board's Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.
9. The discharger shall report any noncompliance that may endanger human health or the environment. The discharger shall immediately report orally information of the noncompliance as soon as (1) the discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, to the Regional Board office and the Office of Emergency Services. During non-business hours, the discharger shall leave a message on the Regional Board office voice recorder. A written report shall also be provided within five (5) business days of the time the discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility to the Regional Board office in accordance with the above time limits.
10. The discharger shall allow the Regional Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the premises regulated by this Board Order, or the place where records must be kept under the conditions of this Board Order;
 - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Board Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Board Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Board Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
11. The discharger shall comply with the following:
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- b. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Board Order, and records of all data used to complete the application for this Board Order, for a period of at least five (5) years from the date of the sample, measurement, report or application.
 - c. Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements.
 - 2. The individual(s) who performed the sampling or measurements.
 - 3. The date(s) analyses were performed.
 - 4. The individual(s) who performed the analyses.
 - 5. The results of such analyses.
12. Prior to any change in ownership or management of this operation, the discharger shall transmit a copy of this Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Board.
13. Prior to any modifications in this facility, which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharger shall report all pertinent information in writing to the Regional Board and obtain revised requirements before any modifications are implemented.
14. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
15. All storm water discharges from this facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies, regarding discharges of storm water to storm water drain systems or other courses under their jurisdiction.
16. Storm water discharges from the facility shall not cause or threaten to cause pollution or contamination.
17. Storm water discharges from the facility shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
18. The discharger shall provide a plan as to the method, treatment, handling and disposal of solids waste that is consistent with all State and Federal laws and regulations and obtain prior written approval from the Regional Board specifying location and method of disposal, before disposing of treated or untreated solid waste.
19. The discharger shall submit to the Regional Board a toxicity reduction evaluation (TRE) workplan (1-2 pages) within 90 days of the effective date of this permit. This plan shall describe the steps the permittee intends to follow in the event that toxicity is detected, and should include at a minimum:
- a. A description of the investigation and evaluation techniques that will be used to identify potential causes/sources of toxicity, effluent variability, and treatment system efficiency;
 - b. A description of the facility's method of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility;
 - c. If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or outside consultant).

20. The discharger shall submit data sufficient to determine if a water quality-based effluent limitation is required in the discharge permit as required under the California Toxics Policy. It is the discharger's responsibility to provide all information requested by the Regional Board for use in the analysis. The permit shall be reopened to establish water quality-based effluent limitations, if necessary.
21. In addition, should the discharger request to use a translator for metals and selenium different than the USEPA conversion factor, it shall complete a translator study within two (2) years from the date of the issuance of this permit as stated in the California Toxics Policy. In the event a translator study is not completed within the specified time, the USEPA conversion factor-based effluent limitation as specified in the CTR shall be effective as a default limitation.
22. The discharger shall begin monitoring its effluent for the seventeen (17) 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin equivalents listed in Section 3, Table 4 of the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California", congeners once during the dry weather and once during the wet weather each year for a period of three (3) consecutive years. The purpose of the monitoring is to assess the presence and amounts of the congeners being discharged to inland surface waters, enclosed bays, and estuaries for the development of a strategy to control these chemicals in a future multi-media approach.
23. The discharger shall, as required by the Executive Officer, conduct a Pollutant Minimization Program in accordance with the California Toxics Policy when there is evidence that the priority pollutant is present in the effluent above an effluent limitation and a sample result is reported as detected and not quantified and the effluent limitation is less than the reported minimum level; or a sample result is reported as not detected and the effluent limitation is less than the method detection limit.
24. The permit shall be reopened and modified or revoked and reissued as a result of the detection of a reportable priority pollutant identified by special conditions' monitoring data, included in this permit. These special conditions in the permit may be, but are not limited to, fish tissue sampling, whole effluent toxicity tests, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in the permit as a result of the special condition monitoring data.
25. This Board Order does not authorize violation of any federal, state, or local laws or regulations
26. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
27. This Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption of new regulations by the SWRCB or the Regional Board, including revisions to the Basin Plan.

I, Philip A. Gruenberg, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy

of an Order adopted by the Regional Water Quality Control Board, Colorado River Basin Region, on July 1, 2004.

Executive Officer